

ABSTRACT OF THE DISCLOSURE

A system provides computer network access to PPP clients. The system includes (a) receiving a PPP session creation request from a client, the PPP session creation request including a control protocol frame encapsulated therein, (b) obtaining user domain information associated with the PPP session creation request, (c) setting up a Layer 2 tunnel according to a parameter contained in the control protocol frame, (d) creating an ingress PPP object associated with an incoming PPP session, a host object associated with the client, and an egress PPP object associated with the Layer 2 tunnel, (e) creating an egress IP object based upon obtained user domain information, the egress IP object associated with IP-based forwarding, (f) linking the ingress PPP object, the host object, and the egress PPP object, thereby forwarding data packets from a PPP session with the client over the Layer 2 tunnel, and (g) linking the host object and the egress IP object, thereby forwarding IP frames received from the client over a link other than the Layer 2 tunnel.